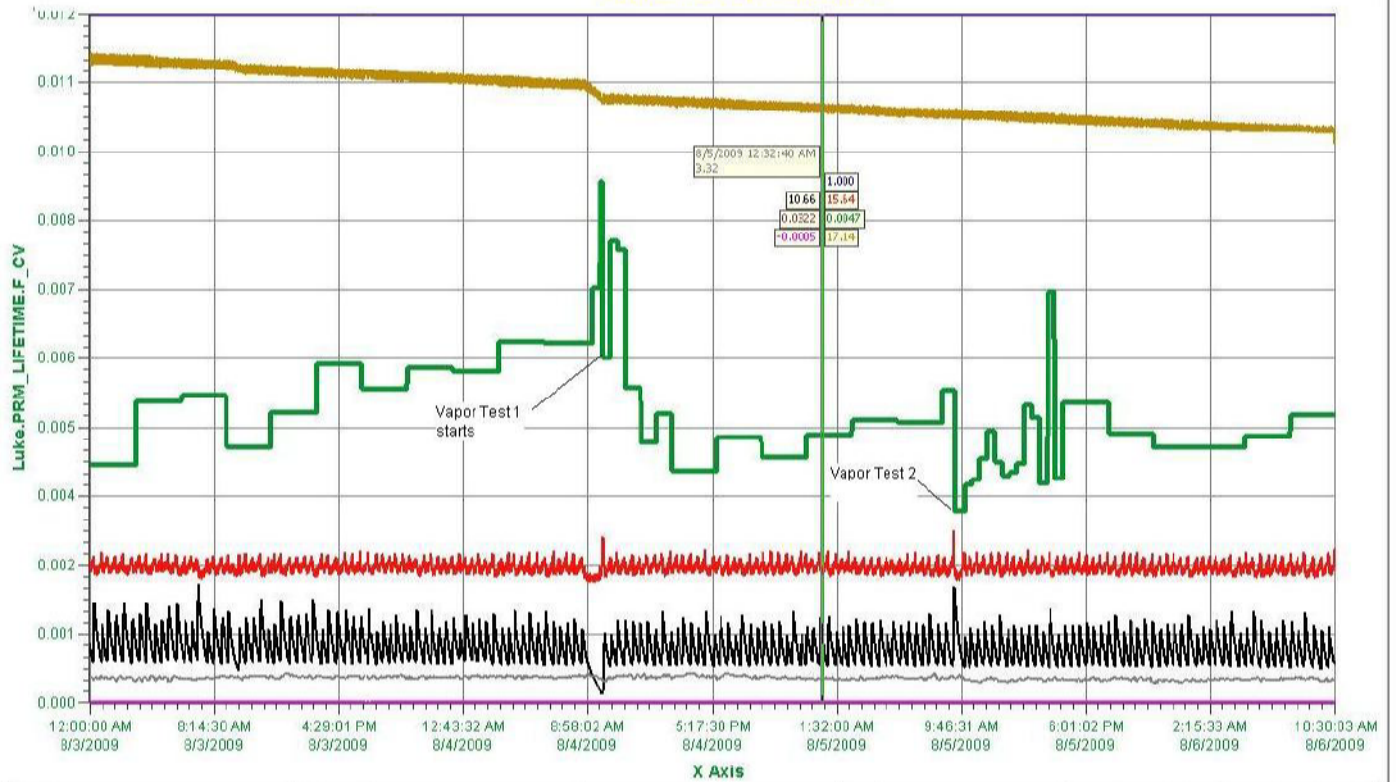


PAB Materials Test System	
Date of Receipt	8/13/2009
Sample Name/Description	LED/ High Efficiency Green MV54643(HLMP-1503)
Sample	
Composition:	GaPh light emitting diode encapsulated in epoxy with metal leads
Picture Location:	eLog 7/31/09
Density:	x
Weight:	25.9g (201 LEDs), 215g (LEDs+metal box)
Dimensions/Area:	200 LEDs, single LED:green package 3.1x4.5mm, 2 leads 0.5x26.4mm
Source:	Walter Jaskierny
Preparation:	Carefully cleaned with ethanol saturated wipes and put into cleaned metal box
Submerging in LAr or LN2	x
Zero Test	x
Time in the airlock(hrs)	96h total (57h no purging, because gas run out over the weekend)
Purge:	start 7/31/09, 38h with gas from the bottle , and 1h with Luke gas
Vacuum:	x
Vapor Test 1	
Start Time/Date, End Time/Date :	8/4/09 10:00am, 8/5/9 9:20am
PrM run # :	5678
Condenser state:	on
Filter state:	on
O2 reading:	0.35ppb
H2O reading:	3.5 ppb
Temperature:	225K
Lifetime:	9ms- before moving to vapor, 6ms - 3min after
Vapor Test 2	
Start Time/Date, End Time/Date :	8/5/09 9:20am, 8/6/09 12:00pm
PrM run # :	5691
Condenser state:	on
Filter state:	on
O2 reading:	0 ppb (-0.045)
H2O reading:	3.4 ppb
Temperature:	120K - 135K
Lifetime:	3.3ms - 5min after moving to lower temp., 5.3ms - 26 hours after
Liquid Test	x
Start Time/Date, End Time/Date :	
PrM run # :	
Condenser state:	
Filter state/settings:	
O2 reading:	
H2O reading:	
Temperature:	
Lifetime:	
Liquid level :	
Results & Comments	LEDs were submerged in LAr for 1-2min between Vapor Test 1 and Vapor Test 2 because we moved it too low in Luke. LEDs(HLMP-1503) can be used in low temperatures. LED historical data plot is in eLog 8/6/09

LUKE HISTORICAL DATA



Pen Name	Description	Value	Eng Units	High Over Range	Low Over Range
Luke.PRM_LIFETIME.F_CV	Luke.PRM_LIFETIME.F_CV	0.00466	sec	0.00908	0.00333
Luke.PRM_IMPURITIES.F_CV	Luke.PRM_IMPURITIES.F_CV	0.0322	imps	0.0450	0.0165
PAB_S1_CRYOSTAT_PRESSURE...	Luke Vapor Pressure	15.64	psig	19.88	13.90
PAB_S1_LT_10_N2.F_CV	Luke Condenser LN2 Level Probe (F_...	10.66	inches	17.16	1.18
PAB_S1_LT_13_AR_REAL.F_CV	Luke Argon Level Probe	17.14	inches	18.85	16.20
PAB_S1_AE_350_AR_REAL.F_CV	Nano Trace oxygen analyzer output (F_...	-0.000	ppm	-0.000	-0.001
PAB_S1_AE_311_AR_REAL.F_CV	Oxygen monitor connected to air lock p...	1.000	ppm	1.000	1.000
PAB_S1_AE_423_AR_REAL.F_CV	HALO H2O meter (F_CV)	3.32	ppb	4.15	2.68

8/3/2009 12:00:00 AM Start of Monday This Week Current 8/5/2009 10:30:03 AM

